North Holland
Microprocessing and Microprogramming 23 (1988) 385–386

Subject Index to Volume 23

A*N codes 23 (1988) 63
Abstract data type implementation 23 (1988) 95
Abstract datatyping 23 (1988) 239
Addressing mode 23 (1988) 267
Algorithm implementation 23 (1988) 253
Angular errors 23 (1988) 327
Application connection establishment 23 (1988) 373
Assembly language 23 (1988) 215
ASTOR 23 (1988) 227
ASTOR architecture 23 (1988) 215
Atomic action 23 (1988) 261
Automatic process switching 23 (1988) 267
Autonomous mobile robot 23 (1988) 135

Bit-steering algorithm 23 (1988) 21
Bus hierarchy 23 (1988) 351

CAD 23 (1988) 75
CAD systems 23 (1988) 51
CAD tools 23 (1988) 37
CAMAC crate controller 23 (1988) 153
Chip design 23 (1988) 51
Chip-architecture 23 (1988) 47
CIM 23 (1988) 199
Co-processor 23 (1988) 143
Communication kernels 23 (1988) 233
Computer networks 23 (1988) 373
Concurrent Euclid 23 (1988) 267
Concurrent system operation display 23 (1988) 173
Concurrent systems 23 (1988) 305
Conical scan tracking radars 23 (1988) 327
Connection oriented network service 23 (1988) 367
Consistency 23 (1988) 261
Control algorithm 23 (1988) 57
Control memory 23 (1988) 9
Control statements 23 (1988) 267
Control store 23 (1988) 21
Control variable 23 (1988) 207
Controller 23 (1988) 9
CP/M 23 (1988) 191
CPU selftest 23 (1988) 167
CRISC 23 (1988) 239

Daisy architecture 23 (1988) 95
Data architecture 23 (1988) 57
Debugging tool 23 (1988) 173
Decision nodes 23 (1988) 207
Demodulation and filtering 23 (1988) 327
Design alternatives 23 (1988) 75
Digital processors 23 (1988) 33
Digital signal processing 23 (1988) 221
Digital system controller 23 (1988) 57
Digital tape recorder 23 (1988) 333
Dimensional design 23 (1988) 305
Disk file organization 23 (1988) 191
Dispatch tables 23 (1988) 9
Distributed control 23 (1988) 227
Distributed environments 23 (1988) 233
Distributed intelligence 23 (1988) 351
Distributed interconnection 23 (1988) 243
Distributed office environment 23 (1988) 311
Distributed programming 23 (1988) 279

EDIF 23 (1988) 15
Error detection 23 (1988) 63
Error recovery 23 (1988) 261
Expert system 23 (1988) 47
Exploratory chip design 23 (1988) 75

Fault-tolerance 23 (1988) 233
Firmware support 23 (1988) 267
Floating point arithmetic 23 (1988) 179
Functional blocks 23 (1988) 33

Generalized layout/circuit relations 23 (1988) 15
Geographical distributed network 23 (1988) 379
Graphic workstation 23 (1988) 357
Graphics 23 (1988) 359
Greek alphabet 23 (1988) 103

Hardware design 23 (1988) 57
Hardware implementation 23 (1988) 115
Hardware processor 23 (1988) 103
Heterogeneous processing configuration 23 (1988) 291

I/O pins 23 (1988) 27
IBM PC/XT 23 (1988) 153
IC design 23 (1988) 37
Image processing 23 (1988) 95
Information compaction 23 (1988) 167
INMOS 23 (1988) 149
Intelligent interface 23 (1988) 333
Intelligent workstation 23 (1988) 351
Interactive microprogram transformations 23 (1988) 3
Interactive speech 23 (1988) 199
Interprocessor interrupts 23 (1988) 185

LAM processing 23 (1988) 153
LAN 23 (1988) 199, 367
Language design 23 (1988) 299
Level protocol 23 (1988) 367
Linear directory 23 (1988) 191
Logic design 23 (1988) 27
Low-level vision 23 (1988) 135

Machine learning approach 23 (1988) 81
Manipulators 23 (1988) 129
MAP/TOP network 23 (1988) 199
Measurability 23 (1988) 157
Measured redundancy 23 (1988) 247
Message passing 23 (1988) 185, 227
Microarchitecture 23 (1988) 143
Microinstruction 23 (1988) 21
Microprogrammed controller 23 (1988) 21
Module estimations 23 (1988) 81
Motor control 23 (1988) 339
Multi-microprocessor system 23 (1988) 123
Multi-way branching 23 (1988) 9
Multibus 23 (1988) 351
Multiprocessing system 23 (1988) 221
Multiprocessor microprogrammed system 23 (1988) 157
Multivalued decision diagrams 23 (1988) 207

Network node 23 (1988) 149
Network topology 23 (1988) 253

OCCAM 23 (1988) 261

Parallel 23 (1988) 115
Parallel processes 23 (1988) 233
Parallel processing 23 (1988) 239
Parallel processing constructs 23 (1988) 215
Parallel processor 23 (1988) 283
Parallel symbolic processor 23 (1988) 149
Parallelism extraction 23 (1988) 87
Partitioning algorithms 23 (1988) 33
PC-DOS 23 (1988) 191
PCB-CAD system 23 (1988) 359
Performance evaluation 23 (1988) 185
Peripheral 23 (1988) 129
Petri nets 23 (1988) 87, 185
Picture generation 23 (1988) 357
PLAS 23 (1988) 27
Problem oriented concurrent systems 23 (1988) 317
Processor control 23 (1988) 33
Product terms 23 (1988) 27
Prolog 23 (1988) 143

Query language 23 (1988) 299

Real time system 23 (1988) 157
Real time transmission 23 (1988) 199
Real-time emulation 23 (1988) 203
Reconfigurable multi-transputer sytems 23 (1988) 247
Reconfigurable multicomputer system 23 (1988) 243
Refresh storage 23 (1988) 357
Reliability 23 (1988) 157
Resource sharing 23 (1988) 379
RISC 23 (1988) 179
Robot arm trajectories 23 (1988) 129
Robot welders 23 (1988) 123

Selftest 23 (1988) 153
Sequential programs 23 (1988) 87
Serial multipliers 23 (1988) 63
Shared bus multi-microprocessor system 23 (1988) 185
Signature analysis 23 (1988) 167
Small scale DBMS 23 (1988) 311
Small scale systems 23 (1988) 299
Software engineering 23 (1988) 305
Software fault-tolerance 23 (1988) 261
Sorting processor 23 (1988) 273
Space positioning 23 (1988) 339
Special purpose processing units 23 (1988) 227
Structural descriptions 23 (1988) 15
Support environment 23 (1988) 317
Switching elements 23 (1988) 243
Symmetric 23 (1988) 115
Synchronization mechanism 23 (1988) 233
System controller 23 (1988) 123
System model 23 (1988) 157
System reliability 23 (1988) 247
System service 23 (1988) 279
Systolic arrays 23 (1988) 63

Task scheduling 23 (1988) 283
Task to task communication 23 (1988) 379
Telephone metering system 23 (1988) 345
Text processing 23 (1988) 103
Text readers 23 (1988) 103
Thinning algorithms 23 (1988) 115
TOP 23 (1988) 199
Transputer 23 (1988) 149, 253
Tree directory 23 (1988) 191

Unification 23 (1988) 143

Verification 23 (1988) 3
VLSI 23 (1988) 37, 75, 81, 273, 351
VLSI applications 23 (1988) 87
VLSI modules 23 (1988) 51
VME based module 23 (1988) 221

Word compaction algorithm 23 (1988) 21

North Holland
Microprocessing and Microprogramming 23 (1988) 387–389

Author Index to Volume 23

Aijanen, T., Distributed Interconnection of a Reconfigurable Multicomputer System 23 (1988) 243
Al-Mouhamed, M. and Almohammad, H.A., A Multi-Microprocessor System for the Control of Robot Welders 23 (1988) 123
Alderighi, M., Mantoani, L. and Sechi, G.R., A DAISY Architecture for Abstract Data Type Implementation in Image Processing 23 (1988) 95
Aleksic, T., *see* Jovanov, E. 23 (1988) 273
Almohammad, H.A., *see* Al-Mouhamed, M. 23 (1988) 123
Andriessen, J.H.M., Task Scheduling Programming System for the Delft Parallel Processor 23 (1988) 283

Baitinger, U.G., *see* Mahler, H. 23 (1988) 33
Berce, J., Graphics Fundamentals for a PCB – CAD PC System 23 (1988) 359
Binaghi, E., Lisca, L., Proserpio, A. and Sechi, G.R., An Abstract Description Generator for the Reliability Analysis in the Design of Real Time Systems 23 (1988) 157
Blodel, J., Hartenstein, W., Nebel, W. and Ryba, M., A Technology Description Method for Generalized Layout / Circuit Relations 23 (1988) 15
Bourbakis, N.G. and Jang, W., An Efficient, Parallel-Symmetric Thinning Algorithm and its Hardware Implementation 23 (1988) 115
Bourbakis, N.G., ANAGNOSTIS – An Automatic Text Reading System 23 (1988) 103
Bruchem, D.J.J. van, Roubos, J.B. and Schellingerhout, B., Implementation of the Connection Oriented Network Service on a LAN 23 (1988) 367
Bruck, K., Kirilov, A.S., Krushinsky, D., Prikhodko, V.I. and Voigt, K., A Personal Computer Based Graphic Workstation 23 (1988) 357

Churin, I.N. and Georgiev, A., A CAMAC Crate Controller for IBM PC/XT Family Computers with Built-in Selftest Features 23 (1988) 153
Coleman, M. and Pratt, S., Dimensional Design: A Software Engineering Tool for the Design of Concurrent Systems 23 (1988) 305
Crookes, D., *see* Milligan, P. 23 (1988) 253

Das, P.K. and Fay, D.Q.M., Dynamically Reconfigurable Multi-Transputer Systems 23 (1988) 247
Davila, J.M., Phillips, A.J. and Tabak, D., Floating Point Arithmetic on a Risc 23 (1988) 179
De Blasi, M. and Gentile, A., A Co-processor for Unification in Prolog: The Microprogramming Level 23 (1988) 143
Della Rosa, F., *see* Spalla, M. 23 (1988) 379
Dirkx, E., CRISC – Configurable Reduced Instruction Set Computer or Complex Reconfigurable Instruction Set Computer 23 (1988) 239
Donnely, T., Mapps, D.J., and Wilson, R., An Intelligent Microprocessor Interface for a Low-cost Digital Magnetic Tape Recorder 23 (1988) 333
Drinic, P., *see* Maric, S. 23 (1988) 203
Dvorak, V., A Table-Driven System Controller with Multi-Way Branching 23 (1988) 9
Dvorak, V., Synthesis of Minimal Multivalued Decision Diagrams 23 (1988) 207

Endriss, H., Klein-Hessling, G., Lawitzky, G. and Schallenberger, B., Fast Evaluation of Design Alternatives – A New Approach for Exploratory Chip Design 23 (1988) 75

Fay, D.Q.M., *see* Das, P.K. 23 (1988) 247
Felix, R., *see* Temme, K.-H. 23 (1988) 47
Fornasiero, A., *see* Spalla, M. 23 (1988) 379
Fukami, S., Performance Evaluation Method for Interprocessor Interrupts by Message Passing 23 (1988) 185

Gentile, A., *see* De Blasi, M. 23 (1988) 143
Georgiev, A., *see* Churin, I.N. 23 (1988) 153
Goczyla, K., Reliability of Disk File Organisation for Microcomputers 23 (1988) 191
Goncalves, G., Lecouffe, M.P., Toursel, B. and Niar, S., A Network of Transputers to Emulate a Parallel Symbolic Processor 23 (1988) 149
Grabowiecki, T., Pawlak, A. and Sakowski, W., A University Framework

for Correct by Construction IC Design 23 (1988) 37
Guesalaga, A.R., A Digital Method of Demodulation and Filtering for Angular Errors in Conical Scan Tracking Radars 23 (1988) 327

Halang, W.A., An Independently Working Computer Peripheral Generating Robot Arm Trajectories 23 (1988) 129
Hartenstein, W., *see* Blodel, J. 23 (1988) 15
Herrmann, J., LIMES – Learning Module Estimations 23 (1988) 81
Herrmann, J., *see* Temme, K.-H. 23 (1988) 47
Hinkel, R., Low-Level-Vision in an Autonomous Mobile Robot 23 (1988) 135
Hwang, B.-Y., *see* Kuo, Y.-H. 23 (1988) 21

Iannello, G., Mazzeo, A. and Savy, C., Support Environment for the Development of Problem Oriented Concurrent Systems 23 (1988) 317

Jang, W., *see* Bourbakis, N.G. 23 (1988) 115
Jovanov, E., Aleksic, T., Stojkov, Z. and Starcevic, D., A Sorting Processor for Microcomputers 23 (1988) 273

Kaszuba, R.M., Some Issues on Management of Application Connection Establishment 23 (1988) 373
Kilpatrick, P.L., *see* Milligan, P. 23 (1988) 253
Kirilov, A.S., *see* Bruck, K. 23 (1988) 357
Klein-Hessling, G., *see* Endriss, H. 23 (1988) 75
Kranenburg, P., Communication Kernels – A High Level Synchronization Primitive Supporting Error Handling 23 (1988) 233
Krushinsky, D., *see* Bruck, K. 23 (1988) 357
Kuchcinski, K. and Peng, Z., Parallelism Extraction from Sequential Programs for VLSI Applications 23 (1988) 87
Kung, L.-Y., *see* Kuo, Y.-H. 23 (1988) 21
Kung, L.-Y., *see* Kuo, Y.-H. 23 (1988) 27
Kuo, Y.-H., Hwang, B.-Y. and Kung, L.-Y., Control Store Minimization on the Design of Microprogrammed Controllers 23 (1988) 21
Kuo, Y.-H., Wang, R.-R. and Kung, L.-Y., Logic Using the PLAS with Limited I/O Pins and Product Terms 23 (1988) 27

Lam, H.C.P., *see* Ng, K.W. 23 (1988) 267
Lawitzky, G., *see* Endriss, H. 23 (1988) 75
Lecouffe, M.P., *see* Goncalves, G. 23 (1988) 149
Lieb, H., *see* Mahler, H. 23 (1988) 33
Lines, B.M., A Model for Assessing the Performance of a Local Area Network Employing Technical Office Protocol (TOP) as Part of MAP/TOP Network in a Computer Integrated Manufacturing (CIM) Research Project, for the Transmission of Real Time Interactive Speech 23 (1988) 199
Lisca, L., *see* Binaghi, E. 23 (1988) 157

Mahler, H., Lieb, H. and Baitinger, U.G., Processor Control Part Synthesis Using Effective Partitioning Algorithms 23 (1988) 33
Manasiev, L. and Stainov, R., A System Service for Distributed Programming and Execution in Communication-Oriented Distributed Operating Media 23 (1988) 279
Mantoani, L., *see* Alderighi, M. 23 (1988) 95
Mapps, D.J., *see* Donnely, T. 23 (1988) 333
Maric, S. and Drinic, P., Microprocessor Real-Time Emulation 23 (1988) 203
Marinos, L., *see* Papazoglou, M.P. 23 (1988) 311
Mazzeo, A., *see* Iannello, G. 23 (1988) 317
Milligan, P., Scott, N.S., Crookes, D., Kilpatrick, P.L. and Morrow, P.J., Network Topology – A Critical Factor in the Implementation of Algorithms Intended for Efficient Execution on a Transputer Network 23 (1988) 253
Mital, Z., CDDT – Concurrent System Operation Display and Debugging Tool 23 (1988) 173
Mok, K.Y., *see* Ng, K.W. 23 (1988) 267
Monchaud, S., *see* Shi, J. 23 (1988) 339
Morrow, P.J., *see* Milligan, P. 23 (1988) 253

Nebel, W., *see* Blodel, J. 23 (1988) 15
Ng, K.W., DISCDA – A Digital System Controller Design Assistant 23 (1988) 57
Ng, K.W., Lam, H.C.P. and Mok, K.Y., A Microprogrammed Machine for the Concurrent Euclid Language 23 (1988) 267
Niar, S., *see* Goncalves, G. 23 (1988) 149

Papazoglou, M.P. and Marinos, L., Requirements fro Coupling Small Scale DBMSs in a Distributed Office Environment 23 (1988) 311
Papazoglou, M.P., A Portable Query Language for Small Scale Systems 23 (1988) 299
Pataricza, A., An Improved Signature Analysis Based CPU Self Test 23 (1988) 167
Pavan, M., *see* Spalla, M. 23 (1988) 379
Pawlak, A., *see* Grabowiecki, T. 23 (1988) 37
Peng, Z., *see* Kuchcinski, K. 23 (1988) 87
Perdigao, F., *see* Vieira de Sa, L. 23 (1988) 221
Phillips, A.J., *see* Davila, J.M. 23 (1988) 179
Piuri, V., Stefanelli, R. and Traverso, G., Error Detection in Serial Multipliers and in Systolic Arrays: An Approach Based Upon A*N Codes 23 (1988) 63
Prat, R., *see* Shi, J. 23 (1988) 339

Pratt, S., *see* Coleman, M. 23 (1988) 305
Pratt, S.J., Alchemy Model: An Operating System Model for a Microcomputer Based, Heterogeneous Processing Configuration 23 (1988) 291
Prikhodko, V.I., *see* Bruck, K. 23 (1988) 357
Proserpio, A., *see* Binaghi, E. 23 (1988) 157

Raja, D., Shanthi, R. and Rao, S.R., Computerised Telephone Metering System 23 (1988) 345
Rao, S.R., *see* Raja, D. 23 (1988) 345
Rauscher, R. and Westendorf, J., A System for Verification of Interactive Microprogram Transformations 23 (1988) 3
Roubos, J.B., *see* Bruchem, D.J.J. van 23 (1988) 367
Ryba, M., *see* Blodel, J. 23 (1988) 15

Sakowski, W., *see* Grabowiecki, T. 23 (1988) 37
Savy, C., *see* Ianello, G. 23 (1988) 317
Schallenberger, B., *see* Endriss, H. 23 (1988) 75
Schellingerhout, B., *see* Bruchem, D.J.J. van 23 (1988) 367
Schmitt, F.J., A Heuristic Approach to Analyzing VLSI Modules 23 (1988) 51
Scott, N.S., *see* Milligan, P. 23 (1988) 253
Sechi, G.R., *see* Alderighi, M. 23 (1988) 95
Sechi, G.R., *see* Binaghi, E. 23 (1988) 157
Shanthi, R., *see* Raja, D. 23 (1988) 345
Shi, J., Monchaud, S. and Prat, R., Control of Motors by Microprocessors for Space Positioning and Localization 23 (1988) 339
Spalla, M., Fornasiero, A., Della Rosa, F. and Pavan, M., Task to Task Communication and Resource Sharing in a Geographically Distributed Network 23 (1988) 379
Stainov, R., *see* Manasiev, L. 23 (1988) 279
Starcevic, D., *see* Jovanov, E. 23 (1988) 273
Stefanelli, R., *see* Piuri, V. 23 (1988) 63
Stojkov, Z., *see* Jovanov, E. 23 (1988) 273

Tabak, D., *see* Davila, J.M. 23 (1988) 179
Temme, K.-H., Felix, R. and Herrmann, J., An Expert System for Chip-Architecture Planning 23 (1988) 47
Toursel, B., *see* Goncalves, G. 23 (1988) 149
Traverso, G., *see* Piuri, V. 23 (1988) 63

Ungerer, Th., ASTOR – An Architecture of Special Purpose Processing Units with Distributed Control and Message Passing 23 (1988) 227

Vieira de Sa, L. and Perdigao, F., A Multiprocessing System for the TMS32020 23 (1988) 221
Voigt, K., *see* Bruck, K. 23 (1988) 357
Vojvodic, I.V. and Vranes, P.A., Distributed Intelligence and Bus Hierarchy System Implementation for a Highly Intelligent Workstation 23 (1988) 351
Vranes, P.A., *see* Vojvodic, I.V. 23 (1988) 351

Wang, R.-R., *see* Kuo, Y.-H. 23 (1988) 27
Westendorf, J., *see* Rauscher, R. 23 (1988) 3
Wilson, R., *see* Donnely, T. 23 (1988) 333

Zedan, H., Achieving Atomicity in Occam 23 (1988) 261
Zehendner, E., A Module-Based Assembly Language with Parallel Processing Constructs and its Implementation in the ASTOR Architecture 23 (1988) 215